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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,517	02/10/2004	Woo-Hyuk Choi	8733.345.10-US	8692
30827	7590	06/14/2005	EXAMINER	
<b>MCKENNA LONG &amp; ALDRIDGE LLP</b> 1900 K STREET, NW WASHINGTON, DC 20006				NGUYEN, DUNG T
		ART UNIT		PAPER NUMBER
		2871		

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/774,517	CHOI, WOO-HYUK	
Examiner	Art Unit		
Dung Nguyen	2871		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 March 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 11-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 11-21 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/29/2005 has been entered.
2. Applicant's amendment dated 02/25/2005 has been received and entered. By the amendment, claims 11-21 are now pending in the application.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 11-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,627,470. Although the conflicting claims are not identical, they are not patentably distinct from each other because both application and patent disclose a same method of fabricating a thin film transistor substrate

comprising the step of forming a pixel electrode by using a back exposure as well as the step of forming a protective layer (e.g. passivation layer) includes etching method (see claim 1).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sah, US Patent No. 6,104,042, in view of Kitazawa et al., US Patent No. 5,920,082.

Regarding the above claims, Sah disclose a method of forming a thin film transistor substrate (figure 8D) comprising the step of forming:

- . a substrate (40);
- . a gate electrode (42);
- . a gate insulating layer (44);
- . an active layer (46);
- . a source electrode (48a/48b/48c on left side);
- . a drain electrode (48a/48b/48c on right side) having a bent shape and having a first side facing the source electrode and a second side;
- . a protection layer (52) covers the source electrode only and the first side of the drain electrode;

a pixel electrode (54) overlapped and contacted with the second side of the drain electrode and gate insulating.

Sah does not disclose the step of forming the pixel electrode by using a back exposure. Kitazawa et al. disclose a pixel electrode can be formed by using a back exposure (figure 3, col. 5, lines 17-30.30). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ a pixel electrode by using a back exposure as shown by Kitazawa et al. in order to reduce and self alignment of the pixel electrode to signal lines further improve an aperture ratio of an LCD device (col. 6, lines 10-13).

7. Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sah, US Patent No. 6,104,042, in view of Kitazawa et al., US Patent No. 5,920,082, further in view of Applicant's admitted prior art (APA), figures 2 and 4.

Regarding claims 5-6, 8-9, 26-27 and 29-30, the modification to Sah discloses the claimed invention as described above except for a gate pad, a gate pad electrode as well as a data pad and a data pad electrode. APA's figures 2 and 4 do disclose that a gate/data line (21/24) having a gate/data pad (21/23) electrically contacting a gate/data pad electrode (62/60) through a gate/data pad hole (see figure 4) as claimed. Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ the Lee et al. device having a gate/data pad connected to gate/data line as shown by APA because it is a common practice in the LCD art in order to connect an LCD device to external circuit through gate/data pad electrode.

***Response to Arguments***

8. Applicant's arguments filed 02/25/2005 have been fully considered but they are not persuasive as stated above.

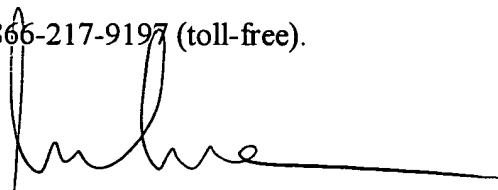
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN  
06/10/2005

  
*Dung Nguyen*  
Primary Examiner  
Art Unit 2871